

MODEL 6225GR GPS VIDEO TIME INSERTER

FEATURES

- Twelve channel GPS receiver with active antenna.
- RS-232 Serial Port.
- Inserts GPS Synchronized Time message into RS-170, NTSC or S-Video. PAL video optional.
- Inserts 4-Character alphanumeric ID message.
- Inserts boresight reticle (crosshair).
- Outputs Time and Latitude & Longitude via serial port.
- Non-volatile Memory.
- Powered by 100 to 240VAC 50/60 Hz



DESCRIPTION

The Model 6225GR GPS Video Time Inserter provides for the insertion of a GPS synchronized time message into an applied RS-170, NTSC or S Video signal. The time message may be positioned to any location in the viewed scene by serial ASCII commands entered via an RS-232 port. Additionally an alphanumeric channel ID message and a boresight reticle may be inserted.

An internal clock is controlled by the GPS receiver. Once the time is established, a loss of GPS lock will cause the 6225GR to automatically switch to an internal clock that will increment the time display until the GPS signal is re-acquired. The default format is UTC time. It is also possible to program a time offset to convert from UTC to local time. This offset is entered via the RS-232 port. Once entered it will be stored in non-volatile memory until overwritten.

In the absence of a GPS signal the 6225GR clock may be set by the user via the RS-232 port. An asterisk will be displayed to the left of the time message to alert the operator that the time is not derived from GPS. A subsequent GPS satellite lock will override the user-entered time.

The 6225GR is powered by 100 to 240VAC 50/60 Hz and includes an active magnetic mount GPS antenna.

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SPECIFICATIONS

Video In A	Standard 525/60 composite video 2:1 interlace, black negative per EIA RS-170, NTSC or S-Video. 75-ohm input impedance. 1.0 volt peak-to-peak. CCIR/PAL optional (6225GRP)
Video In B	Standard Component S-Video (YC).
Video Out	Identical to video input except with message data added and DC restored, 75-ohm impedance (output as specified when terminated by 75-ohm load).
Video Amplifier Bandwidth	> 20 MHz \pm 1db.
GPS Performance	
Channels:	12 Parallel Channels, tracks all satellites in view.
Time-to-first-fix	< 24 seconds typical (warm start), < 150 seconds typical (cold start).
UTC Time Mark	Synchronized with Global Reference Standard.
Reacquisition:	2 seconds typical.
GPS Antenna	Active Patch Magnetic Mount Antenna, 5 VDC, power provided by unit via antenna cable. Gain: 26 db \pm 2db. Noise figure: 1.5db Max.
Frequency Stability	1 part in 10 ⁴ (Internal Clock, unsynchronized)
Power	100 to 240VAC, 50/60 Hz, 5 Watts.
Temperature	
Operating	0°C to +60°C
Non-operating	-20 to +70
Humidity	95% non-condensing.
Package	
Size	19 " Rack mountable 1.75 inches high (1U), 9 inches deep.
Weight	4.5 lbs.
Configuration Utility	Windows 9X, 2000, XP, NT compatible. Provides means of configuring display as well as reading time and position into a PC or laptop.

